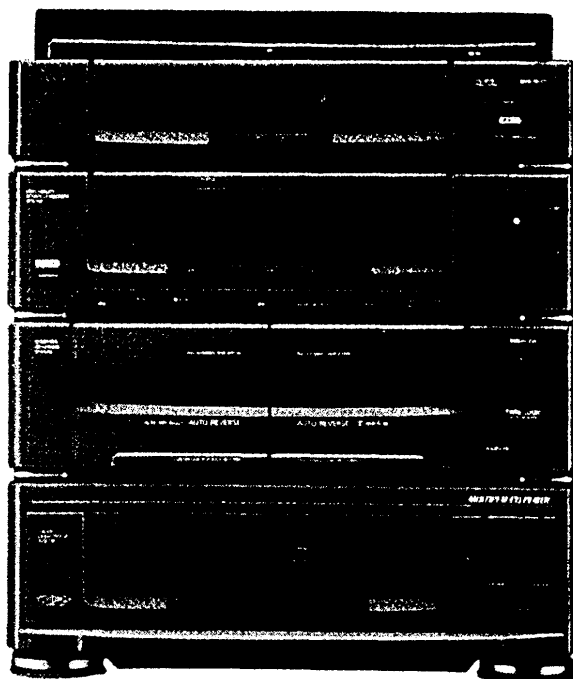


INSTRUCTION
MANUAL

SANYO

DC-X1000MD

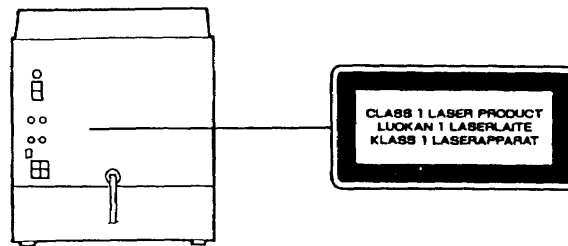
CD STEREO SOUND SYSTEM



TO USE YOUR UNIT PROPERLY AND SAFELY

CAUTION

THIS PRODUCT CONTAINS A LOW POWER LASER DEVICE, TO ENSURE CONTINUED SAFETY DO NOT REMOVE ANY COVERS OR ATTEMPT TO GAIN ACCESS TO THE INSIDE OF THE PRODUCT. REFER ALL SERVICING TO QUALIFIED PERSONNEL.



- If water should enter the unit, electrical shock or malfunction may result. Always use it in a place where there is low humidity and little dust.
- Do not use where there are extremes of temperature (below 5°C or exceeding 35°C) or where direct sunlight may strike it.
- Because of the CD player's extremely low noise and wide dynamic range, there might be a tendency to turn

- the volume on the amplifier unnecessarily high. Doing so may produce an excessively large output from the amplifier which could damage your speakers.
- Sudden changes in the ambient temperature may cause condensation to form on the optical lens inside the system. If this happens, take out the disc, leave the system with the disc table extended for about 1 hour, and then proceed to operate.

BEFORE USE

1. Carefully unpack the unit and other parts. Remove all packing material from around the unit. Also remove the caution sheet putting on the disc table.
2. Locate the unit horizontally on a heavy duty stand or firm level surface, and away from the speaker system to avoid sound feedback.
3. Fit the dust cover to the unit with the hinges as shown in Fig. 1.
4. Place the rubber mat on the turntable platter.
5. Place the 45 rpm adaptor in its appropriate rest position.
6. Be sure to remove two screws (located on the rear of the unit) as shown in Fig. 2. (The removed screws should be retained.)

Before transportation

1. Turn on the power and remove all discs from the trays.
2. Close the disc table.
3. Press the PLAY/PAUSE switch of the CD player. Check that "no disc" appears on the CD display.
4. Turn off the power and disconnect the mains lead.
5. Secure two screws as shown in Fig. 2.

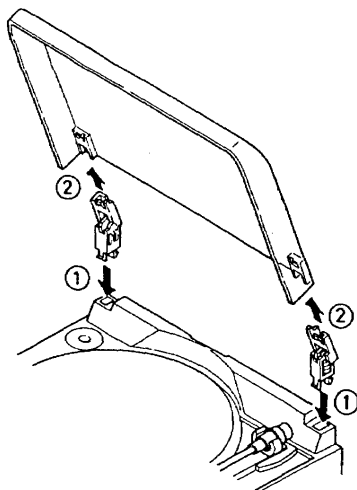


Fig. 1

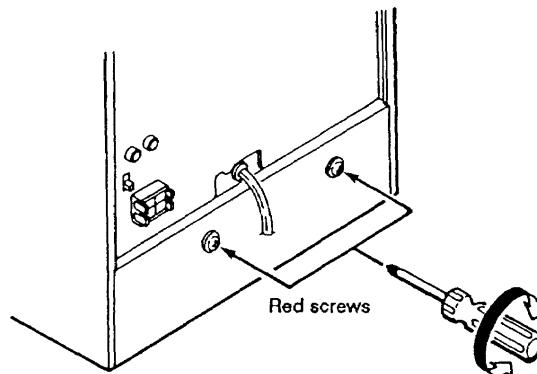


Fig. 2

CONNECTIONS

Power supply

Connect the mains lead to an AC 240 V wall outlet.

Note:

Do not connect the mains lead to an AC outlet until all connections have been made.

IMPORTANT

The wires in the mains lead are coloured in accordance with the following code:

Blue Neutral
Brown Live

The wires in the mains lead must be connected to the terminals in the plug as follows:

Wire colour	Plug terminal marking
Blue	N or Black or Blue
Brown	L or Red or Brown

Do not connect either wire to the earth terminal.

This equipment must be protected by a 3A fuse if a 13A (BS1363) plug is used. If another type of plug is used a 5A fuse or lower shall be used either in the plug or adaptor or at the distribution board.

The unit is not disconnected from the mains unless it is unplugged from the AC outlet.

Aerials (Fig. 3)

In areas close to a transmitter the simple indoor aerial (supplied) is sufficient to receive broadcasts. Extend the aerial wire as straight as possible and, while listening to the sound from the system, secure it in a position which yields minimal distortion and noise.

In fringe areas or where reception is distorted or noisy, an external aerial (not supplied) should be connected instead of the simple indoor aerial.

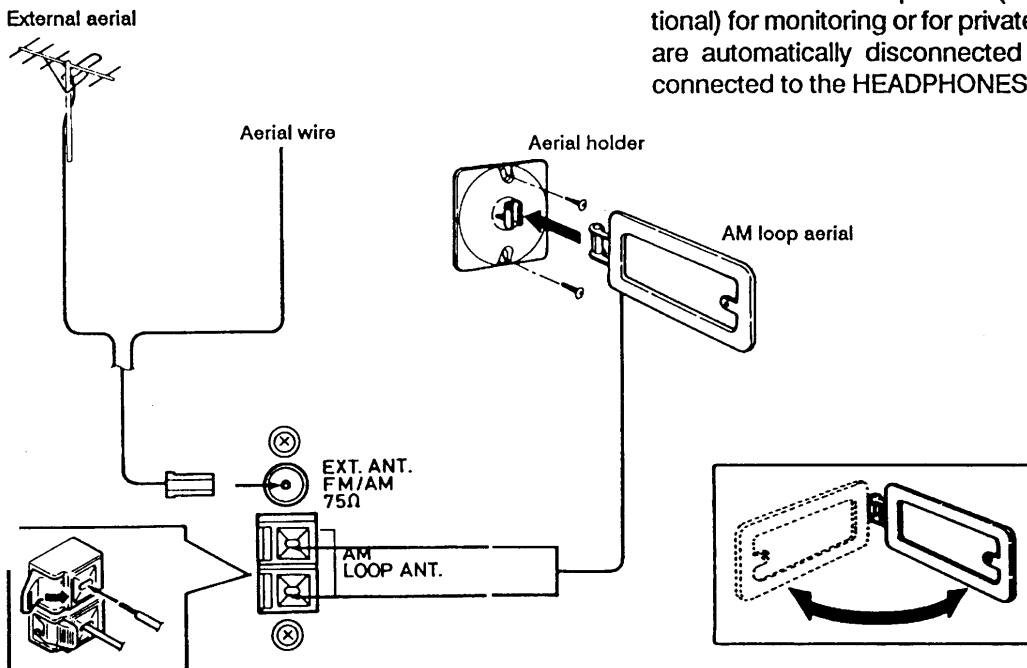


Fig. 3

AM loop aerial

Mount the loop aerial in the aerial holder and place it in a position which yields the best AM (MW/LW) reception, or attach the aerial holder to a wall or other surface. Adjust the aerial's angle for best reception.

Note:

Noise can affect the operation of the system if the aerial is positioned close to the system or a TV set. Place it as far away as possible.

Consult with your dealer if you have any queries or questions related to the selection, installation and connection of aerials.

Speaker terminals (SPEAKERS)

These terminals will accept speakers of 8 ohms minimum impedance. The speaker wires should be connected to the speaker terminals with the proper polarity. The red terminals are (+) positive and black terminals are (-) negative (Fig. 4).

Note:

With incorrect polarity connections, proper stereo reproduction cannot be obtained.

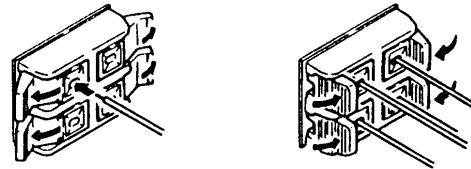


Fig. 4

Video equipment input sockets (VIDEO)

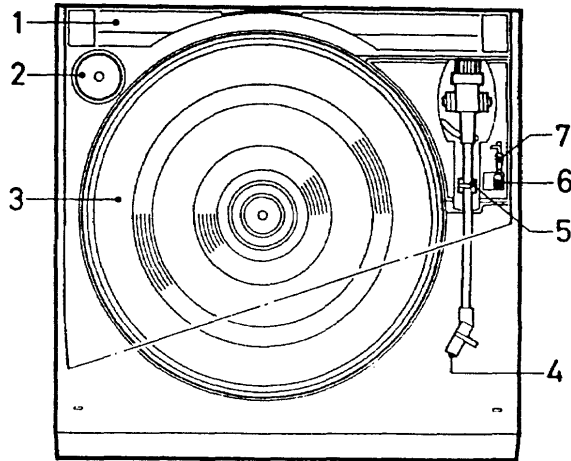
Connection for the audio output sockets of a video equipment.

Headphones socket (HEADPHONES)

Connect stereo headphones (8 ohms to 10 kohms, optional) for monitoring or for private listening. The speakers are automatically disconnected when headphones are connected to the HEADPHONES socket.

CONTROLS

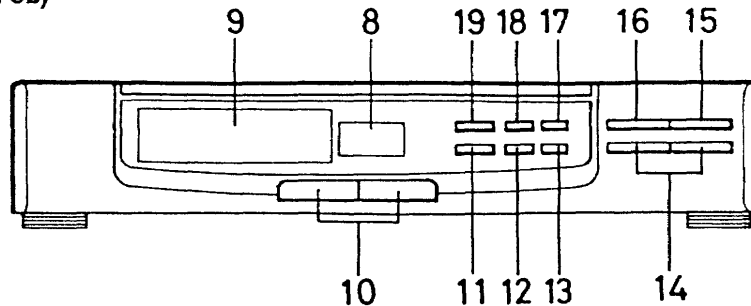
Turntable section (Fig. 5a)



1. Dust cover
2. 45 rpm adaptor
3. Turntable platter
4. Cartridge
5. Tone arm rest
6. Speed selector (33/45)
7. Tone arm lift lever

Fig. 5a

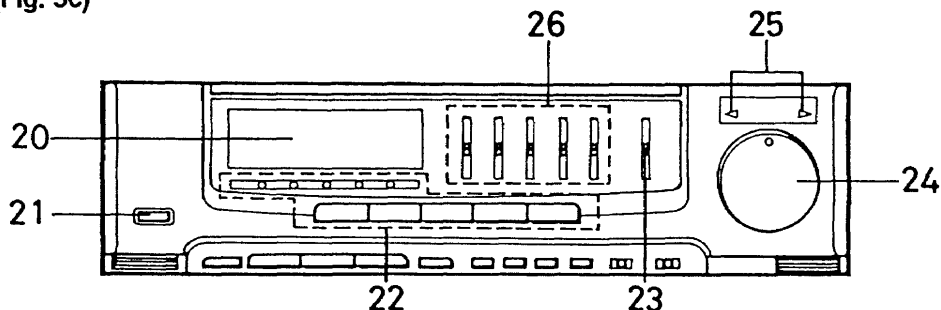
Tuner/Timer section (Fig. 5b)



- | | |
|--|---|
| <ol style="list-style-type: none"> 8. Remote sensor (REMOTE SENSOR) 9. Display 10. Down/Up switches (DOWN/UP) 11. Clock switch (CLOCK) 12. Memory switch (MEMORY) 13. Clear switch (CLEAR) 14. Preset tuning/Automatic preset tuning switches (PRE-SET/APT) | <ol style="list-style-type: none"> 15. Band select switch (BAND SELECT) 16. FM mode switch (FM MODE) 17. Sleep timer switch (SLEEP) 18. Wake-up timer switch (WAKE UP) 19. ON/OFF timer switch (TIMER) |
|--|---|

Fig. 5b

Amplifier section (Fig. 5c)



- | | |
|--|--|
| <ol style="list-style-type: none"> 20. Display 21. Power switch (POWER) 22. Function switches and indicators (TAPE/CD/PHONO/TUNER/VIDEO) 23. Balance control (BALANCE) | <ol style="list-style-type: none"> 24. Volume control (VOLUME) 25. Volume indicators (MOTOR DRIVEN CONTROL) 26. Graphic equalizer controls (5 BAND GRAPHIC EQUALIZER) |
|--|--|

Fig. 5c

Cassette deck section (Fig. 5d)

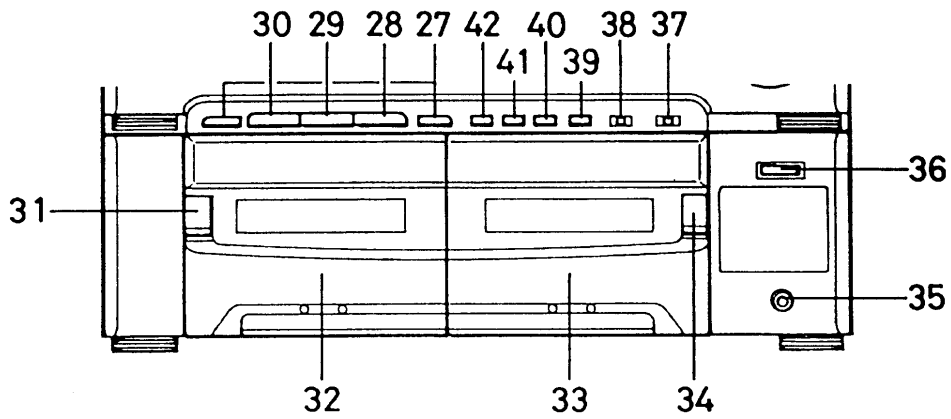


Fig. 5d

- 27. Fast forward and rewind switches (◀▶)
- 28. Forward play switch and indicator (▶)
- 29. Stop switch (STOP)
- 30. Reverse play switch and indicator (◀)
- 31. Deck 1 eject button (EJECT)
- 32. Deck 1 cassette holder
- 33. Deck 2 cassette holder
- 34. Deck 2 eject button (EJECT)
- 35. Headphones socket (HEADPHONES)

- 36. Bass expander switch (BASSXPANDER)
- 37. Reverse mode switch (MODE)
- 38. Dolby noise reduction switch (DOLBY NR)
- 39. Deck 1/2 select switch and indicators (1 DECK 2)
- 40. Computer dubbing switch (COMP. DUB)
- 41. Record muting switch (REC MUTE)
- 42. Record/Record pause switch and indicator (REC/PAUSE)

CD player section (Fig. 5e)

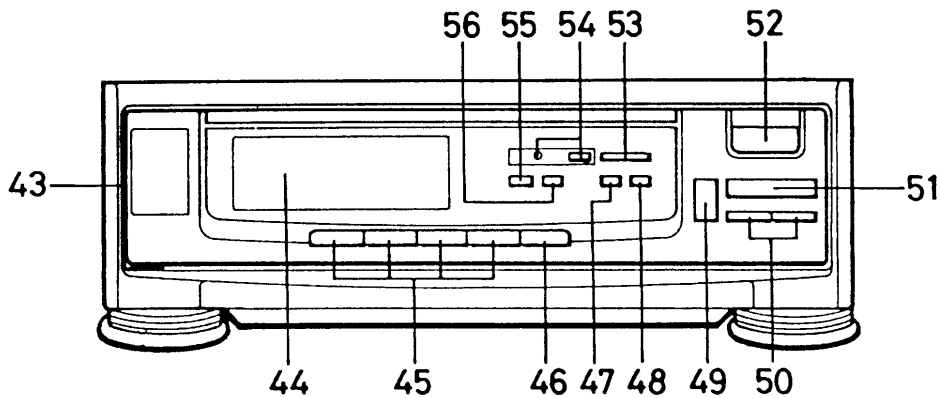


Fig. 5e

- 43. Disc table
- 44. Display
- 45. Disc select switches (DISC 1 - 4)
- 46. Disc skip switch (DISC SKIP)
- 47. Edit switch (EDIT)
- 48. Fade-out switch (FADE)
- 49. Stop switch (STOP)

- 50. Skip/Search switches (SKIP/SEARCH)
- 51. Play/Pause switch (PLAY/PAUSE)
- 52. Disc table open/close switch (OPEN/CLOSE)
- 53. Computer recording switch (COMPUTER REC)
- 54. Disco party switch and indicator (DISCO PARTY)
- 55. Repeat play switch (REPEAT)
- 56. Memory switch (MEMORY)

Remote controller (Fig. 5f)

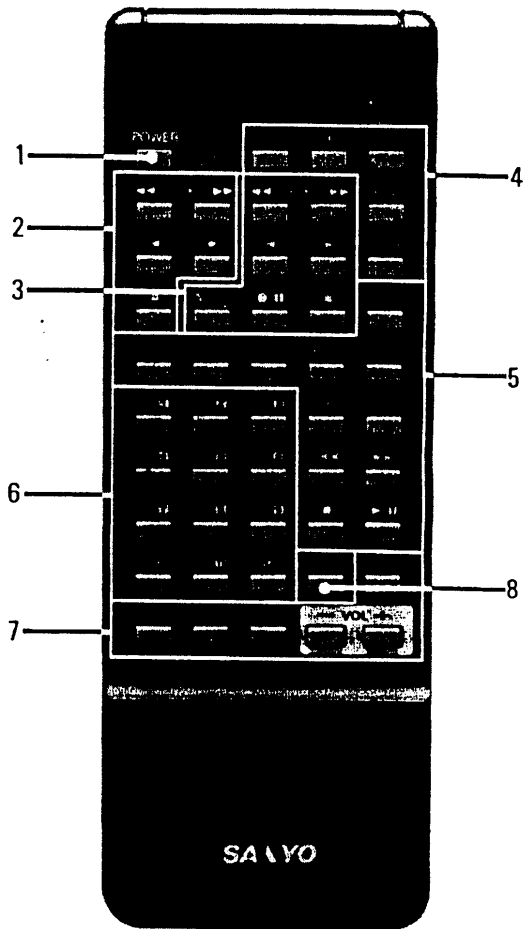


Fig. 5f

1. Power switch (POWER)
2. Deck 1 controls
 - ◀ ▶ : Fast forward and rewind switches
 - ◀ : Reverse play switch
 - ▶ : Forward play switch
 - : Stop switch
3. Deck 2 controls
 - ◀ ▶ : Fast forward and rewind switches
 - ◀ : Reverse play switch
 - ▶ : Forward play switch
 - : Stop switch
 - / ■ : Record/Record pause switch
 - MUTE: Record muting switch
4. Tuner controls
 - TUN +: Tuning controls
 - PRESET: Preset tuning switch
 - BAND: Band select switch
 - MODE: FM mode switch
5. CD player controls
 - TIME: Time display switch
 - CD 10KEY: CD 10-key switch
 - INTRO: Intro play switch
 - RANDOM: Random play switch
 - MEMORY: Memory switch
 - REPEAT: Repeat play switch
 - DISC SKIP: Disc skip switch
 - ▲ : Disc table open/close switch
 - ◀ ▶ : Skip/Search switches
 - ▶ / ■ : Play/Pause switch
 - : Stop switch
6. Number switches
 - 0 - 9, +10: Number switches for CD player
 - [1] - [12]: Number switches for tuner
7. Amplifier controls
 - MUTE: Audio muting switch
 - CD: CD function switch
 - PHONO: PHONO function switch
 - VIDEO: VIDEO function switch
 - VOL +: Volume controls
8. Sleep timer switch (SLEEP)

Number switches (0 to 9, +10 and [1] to [12])

All these switches are used to select both CD tracks and preset radio stations.

If the CD 10KEY switch is pressed then the switches select CD track numbers.

If the BAND switch is pressed, the switches select preset radio stations.

PREPARATIONS FOR REMOTE CONTROL OPERATION

Inserting batteries

1. Open the battery compartment lid by pressing the latch.
2. Install 2 "R6/HP 7" size batteries into the battery compartment matching the polarity as shown in the battery compartment.
3. Close the battery compartment lid.

Note:

Always remove batteries if the remote controller is not going to be used for a month or more. Batteries left in the unit may leak and cause damage.

Remote control range

Use the remote controller within an angle of 30° to the left and right horizontally and over distances up to about 7 meters (Fig. 6).

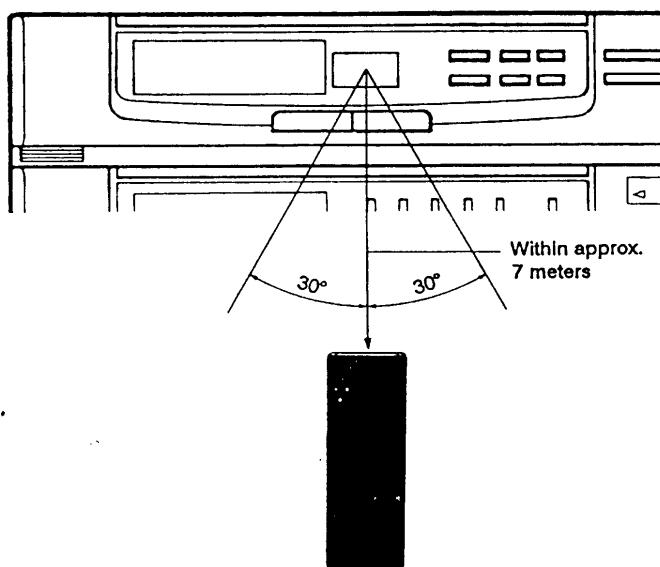


Fig. 6

ADJUSTING THE CLOCK

The clock display blinks when the mains plug is inserted into the AC outlet for the first time or when the programmed details have been lost because of a power failure.

Example: To set "7:30",

1. Press the CLOCK switch for 1 or more seconds. The "CLOCK" and hours displays blink.
eg: CLOCK 0:00
If nothing further is done, the time setting mode will be released after 30 seconds.
2. Press the UP and DOWN switches to set the "hours."
CLOCK 7:00
3. Press the MEMORY switch. The minutes display now blinks.
CLOCK 7:00
4. Press the UP and DOWN switches to set the "minutes."
CLOCK 7:30
5. Press the MEMORY switch. The minutes display now lights and the clock starts operating. ("CLOCK" remains lit.)
CLOCK 7:30

- These operations can be done, even if the POWER switch is turned off.
- The UP and DOWN PRESET/APT switches can also be used for setting the clock.

- The clock uses the 24-hour system.
- Every time the UP or DOWN switch is pressed, the display will be incremented or decremented by 1 hour or 1 minute. If either switch is kept depressed, the display will be continuously incremented or decremented until the switch is released.
- When the minutes are being adjusted, there is no carry-over to the hour display.
- After the "minutes" have been adjusted, the time can be set accurately by pressing the MEMORY switch when the time signal is heard.
- Reset the time when the display blinks because of a power failure. Reset the timer ON/OFF times as well. The TIMER, WAKE UP and SLEEP switches do not function while the display is blinking.
- When the system has been powered for about a day, the clock operation and memory are backed up as follows.
 - The clock operation and memory are backed up even with a power failure lasting 30 seconds or less.
 - When a power failure lasts for more than 30 seconds, the memory contents will be retained for few days but the clock display will blink.

BEFORE OPERATION

1. Turn down the VOLUME control so that the sound will not suddenly be delivered at a high level.
 2. Press the POWER switch. To turn off the power, press it again. "P.OFF" appears on the tuner/timer display for 5 seconds. The clock and amplifier displays remain lit.
- When the mains lead is connected to the AC outlet, the unit is set standby.

When the power is switched ON:

Tuner/Timer:

"Frequency display" appears on the display. (The display which was indicated before the power was switched off will appear.)

Amplifier:

The MOTOR DRIVEN CONTROL indicators and one of the function indicators light. (The function which was selected before the power was switched off is selected.)

CD player:

If the function is "CD", the disc number and "no disc" appears on the display. If discs have been placed on the disc trays and a disc has been selected, its disc number, total number of tracks and total play time will be indicated.

With any other function, the disc number and "Cd OFF" appears on the display.

WHAT TO DO IF ...

If the operation and display do not function correctly, turn off the POWER switch of the main unit and then turn it on again and repeat the operation.

If the power is not turned off even by pressing the POWER switch, disconnect the mains lead from the AC outlet. Then connect the lead to the AC outlet and repeat the operation. In this case, reset the clock and memory contents.

Adjusting the volume

Turn the VOLUME control or press the "+" or "-" VOL switch on the remote controller.

- While either of the VOL switches is being pressed, the MOTOR DRIVEN CONTROL indicator will blink.

To reduce the volume temporarily (muting)

To reduce the volume level, press the MUTE (audio muting) switch on the remote controller. [M] appears on the tuner/timer display and the MOTOR DRIVEN CONTROL indicators blink.

The muting function will be retained for few days even if the unit is turned off or the mains lead is disconnected.

The volume is restored to its previous level by pressing the same switch again.

Adjusting the left/right speaker balance

Use the BALANCE control to adjust the left/right speaker balance. Normally, it is kept at its centre position.

Adjusting the sound quality

By means of the 5 BAND GRAPHIC EQUALIZER controls (100Hz/300Hz/1kHz/3kHz/12kHz), you can set your favourite sound shape flexibly. Flat response is obtained by setting the controls to the centre positions.

Selecting the function

The function is automatically selected when CD play or tape playback has been started or when any of the function switches (except the FM MODE switch) on the tuner has been operated.

- When the function is switched, tape or CD play is automatically stopped. (It is not stopped during tape dubbing.)
- Press the PHONO or VIDEO function switch for turntable or video equipment operation.

Amplifier display

Indicates the input level and peak value of each sound range.

General input level and peak value are indicated on TOTAL.

Bass expander system

Press the BASSXPANDER switch to enhance the bass sound.

Note:

Remember that the tape dubbing mode will be established if the COMP. DUB switch is pressed when tapes have been loaded in both deck 1 and deck 2.

Also remember that when CD has been selected as the function and a tape has been loaded in deck 2, the CD recording mode will be established when the COMPUTER REC switch is pressed.

COMPACT DISCS

Use compact discs bearing the symbol below. In addition to the conventional 12 cm CDs, this system can be used to play 8 cm CDs without an adapter.



Bear in mind the following points since any dirt, scratches or warping of the discs can cause broken or intermittent sound and also noise.

- To remove the disc from its case, lift it out by holding the disc's centre holder with your forefinger and the outside of the disc with your thumb.
- When holding the discs, take care not to touch the playing surface (with the rainbow pattern).
- Store the discs in their cases. Return them to their cases with the label surface facing up and push down lightly from above the label.

- Do not place discs in the following locations:
 - Near a heating device or location where the temperature is high.
 - Under no circumstances should discs be placed on top of a seat or on the dashboard of a vehicle whose windows are all closed and which is exposed to direct sunlight since these areas can become very hot indeed.
 - In damp or dusty areas.
- Do not write on the label surface using a ballpoint pen or hard pencil, and do not stick labels on this surface, either.
- Wipe away any fingerprints or dust on the playing surface of a disc using a soft cloth. Bear in mind the following points.
 - Always wipe from the inside toward the outside of the disc.
 - Do not use regular record cleaners, anti-static agents, benzene, thinners or other solvents.

CD PLAY

Loading discs

1. Press the OPEN/CLOSE switch. The disc table is extended halfway.
2. Place the disc(s) with the label facing up on the disc tray(s) (Fig. 7).
 - With an 8 cm disc, place the disc on the circular section in the centre of the disc tray.
 - Do not place 8 cm and 12 cm discs on the same disc tray.
 - Each time the DISC SKIP switch is pressed, the carousel turns clockwise to the next tray position.
3. Press the OPEN/CLOSE switch again to retract the disc table.

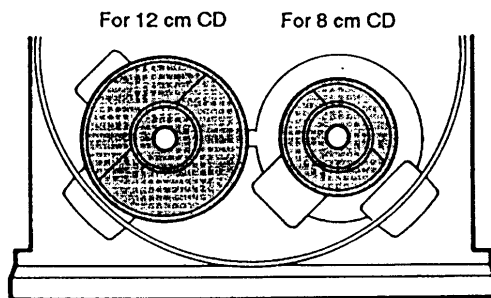


Fig. 7

Note:

- Do not put anything except a compact disc on the tray. Foreign objects can damage the mechanism.
- Do not touch the carousel while it is rotating.
- Do not rotate or stop the carousel by hand. If you do so accidentally, the carousel may not stop at the correct position. If it occurs, carefully set the carousel to the correct position by hand as shown in Fig. 8.
- Take out the disc(s) from the disc table before moving the unit.
- Do not touch the disc table while it is automatically moving. If your finger or any object should get caught in the disc table, press the OPEN/CLOSE switch. The disc table will move in reverse direction.
- The DISC SKIP, disc select or SKIP/SEARCH switch may not function immediately after the carousel turned.

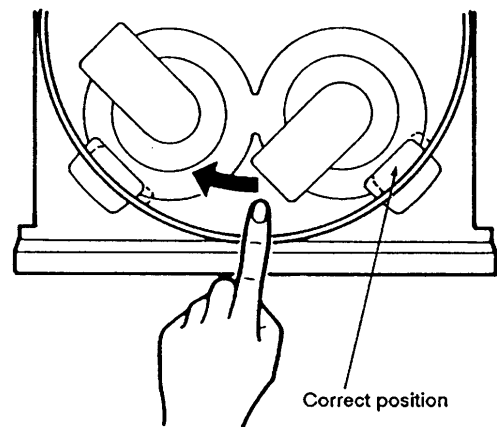


Fig. 8

Playing discs

1. Press a disc select (DISC 1, 2, 3 or 4) switch which corresponds to the tray number of the disc to be played first.
2. Press the PLAY/PAUSE switch. Play starts from the first track. "PLAY" appears on the CD display, and the current disc number, track number, index number and elapsed play times for each track are indicated. The whole number of tracks on the disc is also displayed.
 - If the disc contains 21 or more tracks, "▶" appears on the right of the "20" indication.
 - Play will also commence if the disc table is extended.
3. Play will be interrupted when the STOP switch is pressed, and the stop mode is established. The disc number, total number of tracks and total play time of the disc which has been played are indicated.
4. When the last track of the last disc has been played, the stop mode is established.

Note:

- A disc cannot be played if it is installed bottom side up. If it is installed in this way, "no DISC" appears.
- It may not be possible to play a disc if its surface is marred by scratches, fingerprints or dirt.

Temporarily stopping play

When the PLAY/PAUSE switch is pressed, "PAUSE" appears on the display, and play is temporarily stopped. To resume play, press the switch again.

Direct track selection function

Play can be started immediately from the desired track of disc(s) loaded by operating the remote controller.

While a disc is being played, it is possible to switch immediately to a particular track of disc(s).

Proceed with the operation after the CD 10KEY switch has been pressed.

First display the desired disc number in DISC on the display by pressing the DISC SKIP switch repeatedly. Then

Examples:

To play from the track 3 on the disc, press switch 3.

To play from the track 10, press +10 and then 0.

To play from the track 15, press +10 and then 5.

- If the disc only is selected, play will start from the first track of the selected disc.
- If a track number higher than the last track on the disc is selected, the last track will be played.
- The track number can be assigned using the ◀◀ or ▶▶ switch and play started by pressing the ▶/⏸ switch. These operations can also be performed using the corresponding switches on the main unit.

Skip play function

To skip, for instance, to track 6 while track 3 is being played, press the ▶▶ / ▶▶ SKIP/SEARCH switch until "6" is displayed in TRACK on the display. Play will now skip to track 6.

Alternatively, to skip back to track 3 while track 6 is being played, press the ◀◀ / ◀◀ SKIP/SEARCH switch until "3" is displayed.

- When the skip function is used in the pause mode, play will skip to the start of the track and then it will pause.
- It is possible to skip to a particular track on the other disc(s) in "REPEAT CONTINUE" mode.

Search (forwards/backwards) function

If either the ▶▶ / ▶▶ or ◀◀ / ◀◀ SKIP/SEARCH switch is pressed during play, the player will search at high speed in the forward or reverse direction while the switch is being pressed. When the switch is released, play will begin again at that point.

- While the switch is kept depressed, the sound will be heard at reduced volume during searching.
- If search is performed during pause, the player will return to pause when that switch is released.
- In the forward direction, searching is possible even disc to disc except in "REPEAT ALL" mode.
- Operation will be placed in the pause mode when backward searching arrives at the start of the first track on the disc which is being played.

Intro function

When the INTRO switch on the remote controller is pressed, "INTRO" appears on the display and about 10 seconds of the start of each track will be played. The intro play is possible even disc to disc in continuous repeat play mode.

- When the INTRO switch is pressed again during intro play, the track whose intro is being played and the subsequent tracks will be played through normally.
- When the INTRO switch is pressed during normal play, the intros of the following tracks will be played.
- Skip play is possible using either the ◀◀ or ▶▶ switch during intro play. (Play is possible even if the 0 to 9 and +10 switches are employed.)
- The direct play mode is established even when a function other than CD has been previously selected.

Intro random play

Press the RANDOM switch after the INTRO switch has been pressed.

Random function (automatic programmed play by microcomputer)

When the RANDOM switch on the remote controller is pressed, "RANDOM" appears and the tracks on the discs will be played automatically at random by the microcomputer.

- Random play results when the RANDOM switch is pressed during normal play.
- When the RANDOM switch is pressed during random play, operation moves to the next random programmed track.
- The direct play mode is established even when a function other than CD has been previously selected.

Repeat play function

This unit has three different repeat modes. Press the REPEAT switch repeatedly to select the desired mode in the following sequence. The selected repeat mode is shown on the display.

"REPEAT ONE": Repeating one track

"REPEAT ALL": Repeating all the tracks of a disc

"REPEAT CONTINUE": Repeating all the tracks of all discs

None: Releasing all the repeat modes

The above three modes are effective for normal play, intro play, random play and intro random play.

In programmed play mode, only "REPEAT ONE" and "REPEAT ALL" modes are effective and the last setting mode will always be effective.

Time display selection

During play, the remaining play time on the disc which is being played can be checked using the TIME switch on the remote controller.

- With programmed play, the total remaining time will not be displayed.
- If the track number exceeds 32, the remaining times for each track will not be displayed.
- The play times may not match the times listed on the notes accompanying the disc.

Every time the TIME switch is pressed, the display changes in the following sequence:

(Remaining time for each track) → (Total remaining time)
→ (Time played for each track)

- When stopped, total play time of the disc which has been played is displayed.

PROGRAMMED PLAY (using the remote controller)

The tracks (up to 32) on a disc can be played in any desired sequence whatsoever.

- The same tracks can be programmed over and over again.
- The tracks are programmed in the stop mode of "CD" function.

Programming procedure

Proceed with the operation after the CD 10KEY switch has been pressed.

Example:

Programming tracks 2 and 6 on DISC 1 and track 9 on DISC 2

1. Press the MEMORY switch. "[PROG.]" blinks on the display, and the display indicates as:
eg: DISC 3 TRACK AL (all) STEP 1 1 2 3 ...
2. Select DISC 1 by pressing the DISC SKIP switch repeatedly.
DISC 1 TRACK AL STEP 1 1 2 3 ...
3. Set track 2 which is to be played first by pressing the number switch 2.
DISC 1 TRACK 2 STEP 1 1 2 3 ...
4. Press the MEMORY switch. "[PROG.]" remains lit.
DISC 1 TRACK 2 STEP 1 2
5. Set track 6 by pressing the switch 6. "[PROG.]" blinks.
DISC 1 TRACK 6 STEP 2 2
6. Press the MEMORY switch. "[PROG.]" remains lit.
DISC 1 TRACK 6 STEP 2 2 6
7. Select DISC 2 by pressing the DISC SKIP switch. "[PROG.]" blinks.
DISC 2 TRACK AL STEP 3
8. Set track 9 by pressing the switch 9.
DISC 2 TRACK 9 STEP 3
9. Press the MEMORY switch. "[PROG.]" remains lit.
DISC 2 TRACK 9 STEP 3 9

- The tracks can also be selected using the ◀◀ or ▶▶ switch.
- When programming using the controls on the main unit, use the disc select switches to assign the discs and the SKIP/SEARCH switches to assign the tracks.
- Any attempt to programme more than 32 tracks will result in "FULL" being displayed and discontinuation of the programming.

Programme checking and play

1. Every time the MEMORY switch is pressed once, the programmed details (disc number, track number and their play sequence) appear on the display.
 - These displays will not appear during programmed play.
2. Programmed play is started when the ▶ / ■ switch is pressed.

The stop mode is established when the track programmed last has been played through. (In this case, the programme is not cleared but remains.)

 - During programmed play, if the programmed track does not exist on the disc, the display shows "PErr" (programme error) and then the next programme will be played.

Note:

The programme is cleared in the following cases:

- When the ■ switch is pressed in the stop mode
- When the EDIT switch is pressed in the stop mode
- When the mains lead has been disconnected

Revising or correcting a programme

(Adding onto a programme)

1. Press the MEMORY switch in the stop mode, search for the end of the programme and display "-- -- -- --".
2. Assign the desired disc by pressing the DISC SKIP switch. "[PROG.]" blinks.
3. Use the 0 to 9 and +10 switches (or the ◀◀ and ▶▶ switches) to select the number of the track which is to be added.

4. Press the MEMORY switch. "[PROG.]" remains lit.

(Changing the programmed details)

1. Press the MEMORY switch in the stop mode and display the part of the programme which is to be changed.
2. Select the new disc and its track.
3. Press the MEMORY switch.

Note:

Programmed details cannot be partially deleted or inserted.

Operations during programmed play

- When the ◀◀ or ▶▶ switch is used, skip play is possible following the programmed sequence. (Tracks cannot be selected directly using the 0-9 and +10 switches.)
- If the search function is used during programmed play and the end or beginning of the current track is reached, the unit enters pause mode.

Disco party function

During CD play, taped sound will be heard automatically instead of CD when accessing track or changing disc or when CD sound is interrupted at the between tracks.

1. Load the cassette tape(s) to be played.
2. Select "CD" as the function.
3. Press the DISCO PARTY switch. The DISCO PARTY indicator lights. (This switch can be pressed during CD play.)
4. Press the PLAY/PAUSE switch. Tape playback occurs during access to the CD track to be played first; and then

CD play starts.

(If no cassette tape is loaded, "TUNER" function is selected during access to the CD track, but radio sound will not be heard.)

- To stop disco party function, press the STOP switch of CD player.
- For recording in disco party function, press the DISCO PARTY switch in stop mode, and press the COMPUTER REC switch. In this case, tape will not be played. So CD tracks will be continuously recorded without unrecorded blanks between tracks.

BEFORE TAPE OPERATION

Types of usable tapes

The type of tape used is automatically identified by the system since decks 1 and 2 both employ an auto tape selection system. The following 2 types of tape can be used with this system.

- Normal
- CrO2

Note:

- CrO2 tapes without sensing holes cannot be used since they cannot be identified by the auto selector.
- Endless tapes cannot be used.
- If a tape with one of its tabs already broken out is recorded, the tape will not be reversed automatically, and it will stop.
- Do not use C-120 tapes. They may jam the head section.

Accidental erasure prevention tabs (for protecting valuable recordings)

Accidental erasure can be prevented by breaking out the tabs on the end of the cassette tape (where the tape is not exposed) using a screwdriver or similar implement (Fig. 9). If a tab is broken out in error and you wish to re-record the tape, simply block up the tab hole using cellophane tape and the tape can be used for recording again.

Break out tab A for side A.

Break out tab B for side B.

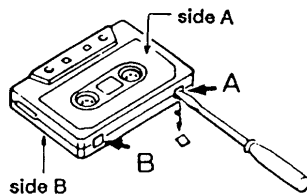


Fig. 9

Dolby Noise Reduction system

The Dolby NR system is designed to reduce the amount of high-range tape hiss which is generated during tape playback. Briefly, it works as follows.

When a programme is recorded, the system boosts the level of the low-volume high-range parts where noise is more liable to be heard, and when the same programme is played back, it attenuates the level of only those parts where the level was boosted, restoring them to their original level. This process simultaneously serves to cut down the amount of noise heard.

More specifically, the Dolby B NR system effectively reduces the amount of tape noise in the high-frequency range and expands the dynamic range whereas the Dolby C NR system effectively decreases the amount of noise in the midrange and above, and increases the degree of noise reduction over and above the Dolby B NR system.

Recordings made using the Dolby B NR system or Dolby C NR system should be played back using the same system. The original sound will not be faithfully reproduced if a tape recording using the Dolby NR system is played back with the DOLBY NR switch at OFF or if a tape recorded with this switch at OFF is played back with the switch at B or [C].

"Dolby" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation. Dolby Noise Reduction system is manufactured under license from Dolby Laboratories Licensing Corporation.

LISTENING TO TAPES

Deck 1 is for playback only; deck 2 is for both playback and recording. Both are auto reverse decks.

1. Press the EJECT button to open the cassette holder.
2. Load the cassette tape.
To load, place the tape with its exposed end at the bottom. After the tape has been loaded, push the cassette holder back into position.
Both ◀ and ▶ indicators light, and 1 or 2 DECK indicator lights.
3. Set the DOLBY NR switch to B, [C] or OFF according to whether the tape has been recorded with the Dolby B NR, Dolby C NR system or not.
4. Select the deck 1 or deck 2 by pressing the DECK select switch if required.
5. Playback commences when the PLAY ▶ or ◀ PLAY switch is pressed. The selected ▶ or ◀ indicator remains lit.
6. Press the STOP switch to stop playback at any time. When the end of the tape has been reached, the automatic stop or automatic reverse will be activated.

Auto reverse

In both decks 1 and 2 tapes can be played back in the following 3 ways using the MODE switch.



For listening to one side of the tape only.



For listening to both sides of the tape in succession. However, if playback has been started from the reverse side, only the reverse side will be played back.



For listening repeatedly to both sides of the tape.

Relay playback (continuous playback on decks 1 and 2)

1. Load the tapes into both decks 1 and 2.
 2. Set the MODE switch to "↔".
 3. Select the deck 1 or deck 2 by pressing the DECK select switch if required.
 4. Press the PLAY ▶ or ◀ PLAY switch.
 - Replay playback will continue from deck 1 (or 2) to deck 2 (or 1) until the STOP switch is pressed.
- ↳ Deck 1 forward side → Deck 1 reverse side
↳ Deck 2 reverse side ← Deck 2 forward side ↳

Fast forwarding and rewinding

Press the ▶▶ or ◀◀ switch. The ▶ or ◀ indicator blinks. When the tape has been wound to the end (or start), the fast forward or rewind function will be automatically released.

Note:

During cassette deck operation, if an operating problem occurs, press the EJECT button and remove the cassette. Reinsert it completely and resume operation.

LISTENING TO THE RADIO

Note:

To avoid noisy radio reception, do not operate the turntable during radio reception.

Memory operation

This unit enables 12 stations FM1, FM2, MW and LW bands to be preset in the memory.

Manual presetting

1. Select the band (FM1, FM2, MW or LW) using the BAND SELECT switch.
2. Press the UP or DOWN switch to tune in the station.
Press the switch and release it as soon as the frequency starts to change. The frequency will change continuously until a station is tuned in, at which time it will stop automatically and the frequency received will be displayed.
 - When the switch is pressed before a station is tuned in, the frequency tuning will stop.
 - When receiving a station with weak signals, press the switch once and then again and again until the station is received. Every time the switch is pressed, the

frequency will change in 9 kHz increments for MW, 1 kHz increments for LW and 0.05 MHz increments for FM.

3. Press the MEMORY switch. "MEMORY" blinks on the tuner/timer display.
4. Select the required preset number by pressing the UP or DOWN PRESET/APT switch or one of the [1] to [12] number switches on the remote controller. The frequency is replaced by the preset number on the display.
eg: MW P 3 kHz MEMORY
 - When the band is selected by the controls on the main unit, check whether the [1] to [12] number switches on the remote controller are functioning as preset tuning switches.
5. Re-press the MEMORY switch to preset the station. "MEMORY" disappears and the display returns to the original display.
 - If the next step is not taken within 30 seconds in the steps "3" to "5", "MEMORY" disappears. In this case, press the MEMORY switch again.
6. Repeat steps 1 (or 2) to 5, and successively preset the stations.

Automatic presetting

1. Select the band.
2. Press and hold down both UP and DOWN PRESET/APT switches for at least 3 seconds, until "MEMORY" blinks. The unit starts automatic presetting upwards in frequency from the low end of band.
3. When 24 (for FM) or 12 (for MW/LW) stations have been preset or the high end of band is reached, the automatic presetting will stop. "MEMORY" disappears and the preset number 1 station will be heard.
4. Select another band and repeat steps 2 and 3.

Clearing the memory

1. Select the band.
2. Select the preset number to be cleared by pressing the UP or DOWN PRESET/APT switch or one of the [1] to [12] number switches. The preset number appears.
3. Press the CLEAR switch while the preset number is displayed (within 2 seconds). The preset station will then be cleared from the memory but the cleared station will still be heard.

Note:

- After the timer has been set, do not delete the memory of the preset station which is to be operated by the timer. If it is deleted in error, re-programme it into the memory.
- If a new station in the same band is programmed to a preset number already containing a programmed station, the previously programmed station will be cleared.
- If the memory contents are lost because of a loss of power due to a power failure or other such condition, programme the stations again.

Listening to the radio

1. Select "TUNER" as the function using the TUNER function switch.
2. Select the band using the BAND SELECT switch.
3. Select the required preset number by pressing the UP or DOWN PRESET/APT switch or one of the [1] to [12] number switches on the remote controller. The frequency is replaced by the preset number on the display. After 2 seconds, the preset number is replaced again by the received station frequency.
 - If a preset number which has not been programmed is selected, P - - will appear for about 2 seconds and the previous station is selected.
 - The "STEREO" appears when a stereo broadcast from a station in the FM band is tuned in.
 - When a different band is selected, the station heard previously in that band will be tuned in.

FM MODE switch

If the signals from an FM stereo station are weak and reception is poor, press the FM MODE switch and change to monaural reception. ("STEREO" disappears and is replaced by "MONO".)

- If the MONO mode is established and a station is then programmed, that station will always be received in MONO.

RECORD OR VIDEO EQUIPMENT PLAY

Record play

Note:

- Remove the stylus protector.
- Be sure that the tone arm is detached from the tone arm rest before operation, and re-secured again after use.
- Do not turn the turntable platter counter-clockwise.
- When operating the unit for the first time, the tone arm might return to its rest position. This is not a malfunction.
- When operating the unit for the first time, the tone arm might not return to its rest position. Should this occur, shift the arm lift lever to up and gently move the tone arm to near the centre shaft of the turntable. The tone arm will automatically return to its rest position. This is not a malfunction.
- Never grasp or hold the tone arm and platter during operation of the automatic mechanism.

1. Press the PHONO function switch.
2. Place a record on the platter (if required, use the 45 rpm adaptor).

3. Select the speed with the speed selector depending on the disc to be played (33 or 45 rpm).
4. Shift the arm lift lever to up.
5. Slowly move the tone arm to the desired position by hand. The platter will begin to rotate.
6. Shift the arm lift lever to down. The tone arm will then descend onto the disc.
 - If you wish to momentarily stop disc play, shift the arm lift lever to up. Shift it to down to start disc play again.
7. When play is finished, the tone arm will return to its rest position and the platter will cease rotation automatically.

Video equipment play

Press the VIDEO function switch, and listen to the sound.

BEFORE RECORDING AND DUBBING

Recording copyright material without permission of the copyright owners is usually an infringement. If you wish to re-record copyright material, permission from the copyright owner is necessary. SANYO does not approve of, and cannot be held responsible for, any unlawful use of this machine.

Use deck 2 for recording.

1. Press the EJECT button to open the cassette holder.
2. Load the tape for recording.
3. Set the DOLBY NR switch to B, [C] or OFF as desired.
4. Set the MODE switch position.



For recording one side only.



For recording both sides in succession. If recording has been started from the reverse side, only the reverse side will be recorded.



Recording at this switch position is the same as at the "D" position.

- Recording will commence from the forward side with CD computer recording, tape computer dubbing, recording for the first time after loading a cassette into deck 2 and unattended recording using the timer.
- If material is to be copied (dubbed), the sound of the tape in deck 1 will be copied exactly onto the tape in deck 2 regardless of the position of the DOLBY NR

switch. When manual dubbing while listening to the playback sound, however, set the DOLBY NR switch as required for the tape which is being played back in deck 1.

- The unit's reverse function will reverse the tape when it has been fully wound up on one side so that the recorded sound will be lost only for the part which corresponds to the leader tape.
- During recording or dubbing operations, the VOLUME, BALANCE and 5 BAND GRAPHIC EQUALIZER controls will have no effect on the recorded sound even if they are operated.

Automatic record muting

If the REC MUTE switch is pressed lightly once during the recording of a radio programme, CD disc, record disc or video equipment, undesirable parts of the recording can be omitted, and an unrecorded blank lasting about 5 seconds can be created. The recording standby mode will then be established. To resume recording, press the PLAY ► or ◀ PLAY switch whose indicator is blinking or press the REC/PAUSE switch.

Note:

- The automatic record muting function does not work during CD computer recording or tape dubbing.
- To create an unrecorded blank of any length, hold down the REC MUTE switch for the required time. The recording standby mode will be established when the switch is released.

RECORDING COMPACT DISCS

Computer recording

Select "CD" as the function and check that the stop mode is established for both the CD player and deck 2. Then, simply by pressing the COMPUTER REC switch, the system automatically performs the operations below, and the CD play and recording start at the same time.

Deck 2:

Automatic tape rewinding.
Then recording starts.

CD player:

Automatic searching of the beginning of the track to be recorded.

Then pause mode is established.

The REC/PAUSE, DECK 2 and ► indicators light, "PLAY", "COMPUTER REC", "SPACE" and "SIDE A" displays at starting the recording.

Types of edit recording operations

The following edit recording operations can be performed by computer recording. Recording can be made even from plural discs.

- A. Auto edit recording
- B. Programme edit recording
- C. Fade-out edit recording
- D. Backward skip edit recording

Note:

- Recording starts automatically after 8 seconds so that the recording will not be interrupted by the leader tapes on tape sides A and B.
- Material can be recorded with unrecorded blanks lasting 5 seconds created automatically.
- The highest track number which can be edited is 32. Track numbers 33 and above cannot be edited (except backward skip edit).
- To stop computer recording at any time, press the STOP switch of the CD player or deck. Both CD player and deck 2 are now set to the stop mode. (The auto, programme or fade-out editing mode is still operational.)
To release the editing mode, press the STOP switch on the CD player.
- Set the MODE switch to "D" during the computer recording.
- To record material from an interim position on the tape, proceed with manual recording.

Auto edit recording (Fig. 10)

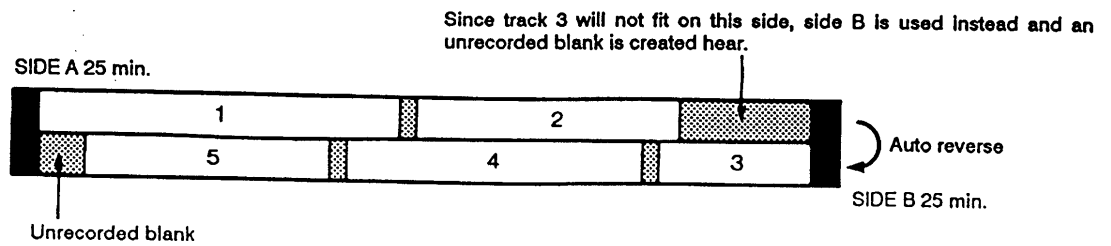


Fig. 10

The tracks are recorded with no change in the track sequence.

Example:

To record all the tracks on a 5-track disc (total play time of 47 min 20 sec) on DISC 2 onto a 50-minute tape

1. Press the DISC 2 switch.

2. Press the EDIT switch to select to the recording tape length. The CD display indicates as:

```
DISC 2 C-46 EDIT SPACE SIDE A
1 2 3 ...
```

Every time it is pressed, the tape length display changes in the following sequence:

C-46 - C-60 - C-90 - (Released) - C-46 - ...

To set the desired tape length up to C-99, use the +10 and 0-9 switches on the remote controller. To set

"C-50", press the +10 switch 5 times then press the 0 switch. "C-50" displays.

- The ◀◀ or ▶▶ switch on the remote controller or the SKIP/SEARCH switches on main unit can be used for the setting.

3. Press the COMPUTER REC switch.

Recording then starts automatically from track 1 on disc 2.

```
PLAY EDIT COMPUTER REC SPACE SIDE A
DISC 2 TRACK 1 INDEX 1 EACH 0.01
1 2 3 ...
```

- The editing mode remains operational even upon completion of play. To release this mode, press the STOP switch.

Programme edit recording (Fig. 11)

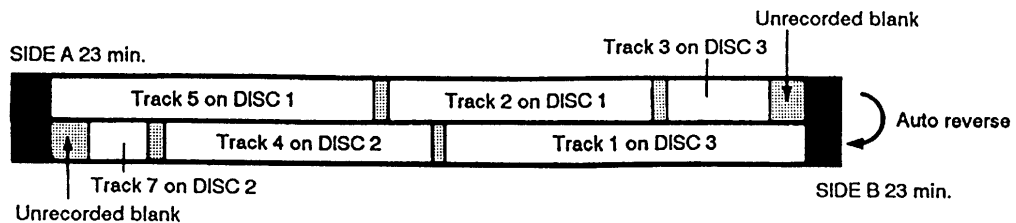


Fig. 11

The programmes can be rearranged and edited on the tape in the desired order within the confines of the selected tape length.

Example:

The following tracks are to be recorded.

Track 5 on DISC 1: 10 min 00 sec

Track 2 on DISC 1: 7 min 26 sec

Track 3 on DISC 3: 4 min 37 sec

Track 1 on DISC 3: 11 min 09 sec

Track 4 on DISC 2: 9 min 21 sec

Track 7 on DISC 2: 1 min 10 sec

These tracks are recorded in the following programme on a 46-minute tape.

Track 5 on DISC 1 - 2 on DISC 1 - 3 on DISC 3 - (auto reverse) - 1 on DISC 3 - 4 on DISC 2 - 7 on DISC 2

1. Press the EDIT switch until "C-46" is displayed.

2. Press the DISC 1 switch.

3. Press the MEMORY switch. "[PROG.]" blinks, and the display indicates as:

```
EDIT SPACE SIDE A [PROG.]
DISC 1 TRACK AL STEP 1 REMAIN 23.00
1 2 3 ...
```

- The remaining time on side A blinks (or appears) on the time display.

4. Press the number switch 5 on the remote controller to display "5" at TRACK.

```
DISC 1 TRACK 5 STEP 1 REMAIN 13.00
1 2 3 ...
```

5. Press the MEMORY switch. "[PROG.]" remains lit.

```
DISC 1 TRACK 5 STEP 1 REMAIN 13.00
5
```

6. Press the switch 2 to display "2" at TRACK. "[PROG.]" blinks.

```
DISC 1 TRACK 2 STEP 2 REMAIN 5.29
5
```

7. Press the MEMORY switch. "[PROG.]" remains lit.

```
DISC 1 TRACK 2 STEP 2 REMAIN 5.29
2 5
```

8. Press the DISC 3 switch.

9. Press the switch 3 to display "3" at TRACK.

10. Press the MEMORY switch.

11. Press the switch 1 to display "1" at TRACK. "[PROG.]" blinks.
 DISC 3 TRACK 1 STEP 4 REMAIN 0.47
 3
 - This exceeds the remaining time on side A and so the remaining time on side A "0.47" blinks on the display.
12. Press the MEMORY switch. "SIDE A" disappears and "SIDE B" appears. "[PROG.]" remains lit.
 DISC 3 TRACK 1 STEP 4 REMAIN 11.51
 1 3
 - The remaining time on side B appears on the time display. This and subsequent tracks are recorded on side B.
13. Press the DISC 2 switch.
14. Press the switch 4 to display "4" at TRACK.
15. Press the MEMORY switch.
16. Press the switch 7 to display "7" at TRACK.
17. Press the MEMORY switch.
 DISC 2 TRACK 7 STEP 6 REMAIN 1.10
 4 7
 - This completes the programming.
18. Press the COMPUTER REC switch.
 Recording then starts automatically from track 5 on disc 1.
 PLAY EDIT COMPUTER REC SPACE SIDE A [PROG.]
 DISC 1 TRACK 5 INDEX 1 EACH 0.01
 2 5
 - The track numbers can also be set using the ⏪ and ⏩ switches on the remote controller or the SKIP/SEARCH switches on the main unit.
 - If a track exceeding the remaining time on side B is programmed, the "Err" display will appear for about 3 seconds.

Fade-out edit recording (Fig. 12)

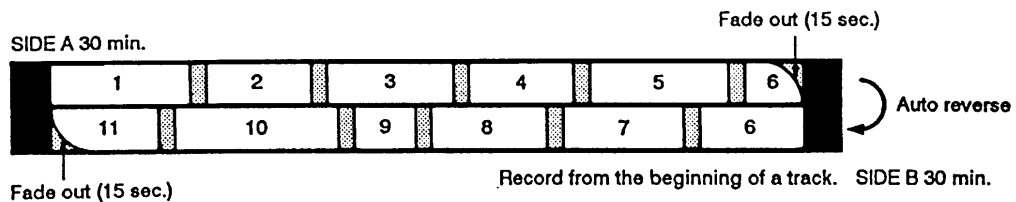


Fig. 12

The sound is faded out at the end of sides A and B with the selected tape length. When side A is automatically reversed to side B, a return is made to the start of the track now being played and the recording is started again.

Example:

To record onto a 60-minute tape

1. Press the EDIT switch until "C-60" is indicated.
2. Press the FADE switch.
3. Programme the desired tracks referring "Programme edit recording" section if required (this step can be omitted).
4. Press the COMPUTER REC switch.

Recording starts from track 1. The CD display indicates as:

eg: PLAY EDIT COMPUTER REC FADE SPACE SIDE A
 DISC 1 TRACK 1 INDEX 1 EACH 0.01
 1 2 3 ...

- "FADE" blinks during actual fade-out (15 seconds).
- When the remaining tape length is less than 15 sec., the track on that part is not faded out.
- The sound is also faded out when a track is interrupted at the end of side B.

Backward skip edit recording (Fig. 13)

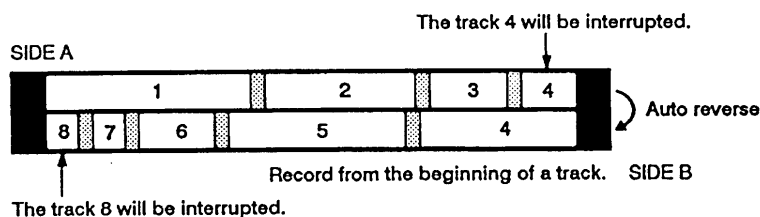


Fig. 13

This type of recording is the easiest to perform and it does not involve the tape length setting. When the tape automatically reverses from side A to side B, a return is made to the start of the track being played and the recording starts.

Press the COMPUTER REC switch. The recording is started automatically in sequence from track 1 on side A. When the tape is reversed, "SIDE A" disappears and "SIDE B" appears, and recording continues on side B.

Manual recording

- For programmed recording, programme the material in advance.
 1. Press the REC/PAUSE switch. (Deck 2 is set to the record-standby mode.)
 2. Press the PLAY/PAUSE switch. CD recording now commences.
- When the CD player is set to the stop or pause mode during recording, deck 2 will be set to the record-pause

mode. When CD play is resumed, deck 2 recording will also resume.

- This method will produce a gap in recording when the tape is reversed.
- If the FADE switch is pressed during play, the sound will be faded out at the corresponding position (about 15 seconds), and the CD player/deck 2 will be placed in the pause/record-pause mode. "FADE" blinks during fade-out.

TAPE DUBBING (DECK 1 to DECK 2)

Computer dubbing:

Used for speedy dubbing (the time required is reduced by about one-half compared with dubbing at the regular tape speed).

Manual (normal-speed) dubbing:

For dubbing while listening to the playback sound from deck 1.

- Load the playback tape into deck 1 and the recording tape into deck 2.
- It is recommended to use the same tape length cassettes for dubbing operation.
- For computer dubbing: material can be dubbed while you are listening to any function (CD, radio, etc.).

Computer dubbing:

Merely by pressing the COMP. DUB switch, the system will perform the operations below automatically and start deck 1 playback and deck 2 recording simultaneously.

1. Deck 1: Tape rewinding.
2. Deck 2: Tape rewinding.
3. Deck 2: Automatic erasing for few seconds from the beginning of tape. Then tape rewinding again.
4. Deck 2: Automatic forwarding of leader tape.

The REC/PAUSE indicator blinks and the DECK 1 and ► indicators light at starting the dubbing.

Automatic stop in computer dubbing operation

When deck 1 tape is longer than deck 2:

In "↔" mode:

When the deck 2 stops automatically, the deck 1 will be in the fast forward mode.

In "↷" mode:

When the deck 2 stops automatically, the deck 1 will be in the fast forward mode. After the end of tape has been reached on deck 1, the system will perform the computer dubbing for reverse side.

When deck 2 tape is longer than deck 1:

In "↔" mode:

When the deck 1 stops automatically, the deck 2 will be in the erasing mode.

In "↷" mode:

When the deck 1 stops automatically, the deck 2 will be in the erasing mode. After the end of tape has been reached on deck 2, the system will perform the computer dubbing for reverse side.

- Before pressing the COMP. DUB switch, check that both deck 1 and deck 2 are in the stop mode.

- Dubbing using the COMP. DUB switch must start from tape selection 1. To start dubbing from the second or subsequent tape selection, use the manual dubbing function.
- To release the dubbing mode, press the STOP switch. The tape will not stop during computer dubbing even when the REC/PAUSE switch is pressed.
- It is not possible to listen to the normal monitoring sound during computer dubbing.
- When switching between manual and computer dubbing, press the STOP switch first to release the dubbing mode and then switch.
- A high-pitched sound may be recorded if computer dubbing is conducted near a TV set which has been switched on. If this happens, either switch off the TV set or place the system at a distance from the TV set.

Manual (normal-speed) dubbing

- Select "TAPE" as the function.
- Set the MODE switch to ↔.
- 1. DECK 2: Find the position to be started recording.
- 2. DECK 1 and 2: With the same tape running direction of the deck 2, find the desired selection to be dubbed.

Note:
Make sure that the deck 1 tape running direction is same the deck 2.
- 3. Press the REC/PAUSE switch (●/■: remote controller). The REC/PAUSE and DECK 2 indicators light and ◀ or ▶ indicator blinks.

Note:
If the blinking indicator is not matched to the set direction, press once the PLAY switch whose indicator is not blinking.
- 4. Press the DECK select switch once or press the remote controller's DECK 1 ▶ or ◀ switch whose indicator is blinking. The REC/PAUSE indicator blinks and DECK 1 indicator lights.
- 5. Press the PLAY ▶ or ◀ PLAY switch (▶ or ◀ DECK 1/DECK 2: remote controller) whose indicator is blinking. Manual dubbing now starts.
- Tape running direction of both decks is same.

Automatic stop in manual dubbing operation

If either deck 1 or deck 2 stops automatically, the other deck will also stop.

RECORDING RADIO PROGRAMMES, RECORDS OR FROM VIDEO EQUIPMENT

1. Tune in the radio station, listen to the record or play the video equipment.
2. Press the REC/PAUSE switch. The REC/PAUSE indicator lights and the ► or ◀ indicator blinks.
3. Press the REC/PAUSE switch again or press the PLAY ► or ◀ PLAY switch whose indicator is blinking. The recording starts. The ► or ◀ indicator lights.
 - To record in the opposite direction to that indicated by the blinking indicator, press once the switch whose indicator is not blinking, check that the other indicator is now blinking, and press the same switch again.
4. Press the REC/PAUSE switch to temporarily stop recording.
5. Press the STOP switch to stop recording.

When beat interference is heard

A high-pitched noise called "beat" is sometimes heard during the recording of radio broadcasts. In cases like this, set the BEAT CANCEL switch at the rear of the unit to the position (1 or 2) which will reduce the level of the beat noise.

USING THE TIMERS

ON/OFF timer:

This enables radio programmes to be recorded unattended. CD play or tape playback can be started and stopped at the selected times.

WAKE UP timer:

This wakes you up to the sound of a CD, tape or radio.

SLEEP timer:

This allows you to fall asleep to the sound of a CD, tape or radio.

Note:

Make absolutely sure that the clock shows the correct present time before setting any of the timers.

USING THE ON/OFF TIMER

First set the ON and OFF times and the source whose sound is to be heard (for the tuner, select the band and preset station). Operation will start with the selected source at the ON time and the power will be switched off at the OFF time.

The timer settings are stored in the memory and retained even when the timer operation has been completed.

Each time the ON/OFF timer is to be actually operated, set the unit to the standby mode.

1. Set the timer ON/OFF times and the operation mode. (See "ON/OFF timer settings" section.)
2. Prepare to hear the sources and prepare to record.
 - For CD play, load discs and select the disc number.
 - For tape playback, load the tape into deck 1 or deck 2. When tapes have been loaded into both decks, deck 2 takes precedence.
 - For tape recording/playback, select the MODE switch position which corresponds to the recording/playback time, and set the DOLBY NR switch as desired. Tape will start from the forward side.
 - Turn down the VOLUME control for unattended recording.
3. Check the timer settings. (See "To check the timer settings" section.)
4. Check that "TIMER ON OFF" (or "TIMER REC ON OFF") is displayed, and then press the POWER switch to turn off the power.

ON/OFF timer settings

1. Press the TIMER switch. The "TIMER ON" and previous timer ON time setting appear.
eg: TIMER ON 13:10
2. Press the MEMORY switch before the 10 seconds elapse. The "MEMORY" and hours displays blink.
TIMER ON 13:10 MEMORY
3. Set the timer ON time by pressing the UP and DOWN switches and then MEMORY switch (in the same way as instructed under "ADJUSTING THE CLOCK").
TIMER ON 22:20 MEMORY →
TIMER OFF 14:00 MEMORY
The previous timer OFF time setting now appears, and both the "TIMER OFF" and hours displays blink.
4. Set the timer OFF time in the same way as described in step 3.
TIMER OFF 23:00 MEMORY →
TIMER SOURCE dISC MEMORY
The previous source setting display blinks.
5. Select the source by pressing the UP and DOWN switches and then MEMORY switch.
 - Every time the UP switch is pressed, the source changes in the following sequence (or in the reverse sequence if the DOWN switch is pressed):
dISC - TAPE - TU - TU REC - dISC - ...
6. Press the MEMORY switch. A return is made to the original display, and the timer operation standby mode is established. ("TIMER ON OFF" remains lit)

Note:

- When the ON/OFF timer (or WAKE UP timer) is set for the first time or when the memory contents have been lost due to a power failure, "-: -:" is displayed for both the ON and OFF times (or for the wake-up time). In cases like this, the MEMORY switch must be pressed after the times have been set using the UP and DOWN switches. If the MEMORY switch is pressed with the "-: -:" display remaining unchanged, "Err" appears, the setting mode is released, and a return is made to the original display.
- The timer mode is released if a power failure occurs during timer operation.
- Also the UP and DOWN PRESET/APT switches can be used for the setting timer.

With tuner reception or unattended recording

The station for timer operation must be preset.

1. Perform step 5 above until "TU" blinks on the display.
TIMER SOURCE TU MEMORY
- Select "TU REC" in the case of unattended recording.
When the MEMORY switch is pressed, the band, preset number and frequency of the previous timer operation are displayed.

eg: TIMER SOURCE P 2 MW 594 kHz MEMORY

2. Select the band using the BAND SELECT switch, and indicate the desired preset number using the UP and DOWN switches or the [1] to [12] number switches on the remote controller.

TIMER SOURCE P 2 FM1 88.10 MHz MEMORY

Note:

When a preset number cleared has been selected, "- - -" blinks. If the MEMORY switch is pressed then, "Err" appears, the setting mode is released and a return is made to the original mode.

3. Press the MEMORY switch. A return is made to the original display.
(The "TIMER ON OFF" or "TIMER REC ON OFF" remains lit.)

To check the timer settings:

1. Press the TIMER switch. The timer ON time setting is displayed.
2. Press the switch again. The timer OFF time setting is displayed.
3. Press the switch again. The timer operation source is displayed.
 - If the tuner is being used as the source, the band, preset number and frequency will be displayed when the TIMER switch is pressed after step 3.
4. If the switch is pressed again, a return is made to the original display.
 - A return will be made to the original display unless the operations in steps 2 to 4 above are performed before the 10 seconds elapse.
 - To change the settings, indicate the setting which is to be changed by performing steps 1, 2 and 3, and press the MEMORY switch so that the display blinks. Then proceed according to the instructions in the "ON/OFF timer settings" section.

To set the timer again using the same settings:

1. Press the TIMER switch. The timer ON time is displayed.
2. Press the MEMORY switch repeatedly until the original display (clock and frequency) is displayed.
3. Press the POWER switch to switch off the power.
 - Unless the power is switched off, the timer will not be activated at the set time, and the timer mode will be released.
 - If the CLEAR switch is pressed while the timer is being set or its settings are being checked, the mode in question will be released and a return made to the original display.
 - To switch off the power during a timer controlled operation, operate the POWER switch. The ON/OFF timer will then be released.

USING THE WAKE UP TIMER

First set the wake-up time and source (including the band and preset station for the tuner) which is to be heard. At the set time, the set source will be heard, and the power will be turned off after 60 minutes. Once the WAKE UP timer has been set, it will function every day unless released.

1. Set the wake-up time and source to be heard. (See "WAKE UP timer settings" section.)
2. Prepare to operate the source which is to be heard.
 - Listen to the sound of the source and set the volume and tone quality controls as desired.
3. Check the timer settings. (See "To check the timer settings" section.)
4. Check that "WAKE UP ON" is displayed, and then press the POWER switch to turn off the power.
 - Press the POWER switch to turn off the power after the power is turned on at the wake-up time.
 - Even after the WAKE UP timer has finished operating, the "WAKE UP ON" display is not cleared and the operation standby mode continues.

WAKE UP timer settings

1. Press the WAKE UP switch. The "WAKE UP ON" and previous wake-up time setting appear.
eg: WAKE UP ON 5:30
2. Press the MEMORY switch before the 10 seconds elapse. "MEMORY" and the hours display blink.
WAKE UP ON 5:30 MEMORY
3. Set the wake-up time by pressing the UP and DOWN switches and then MEMORY switch.
WAKE UP ON 6:00 MEMORY →
WAKE UP SOURCE TAPE MEMORY
The previous source setting display (ie TAPE) blinks.
4. Select the source using the UP and DOWN switches and MEMORY switch.
 - Every time the UP switch is pressed, the source changes in the following sequence (or in the reverse sequence if the DOWN switch is pressed):
disc - TAPE - TU - disc - ...
5. Press the MEMORY switch. A return is made to the original display, and the wake-up operation standby mode is established. ("WAKE UP ON" remains lit.)

Waking up to the sound of the radio

1. Perform step 4 above until "TU" blinks on the display.
When the MEMORY switch is pressed, the band, preset number and frequency of the previous timer operation are displayed.
2. Select the band using the BAND SELECT switch, and indicate the desired preset number using the UP and DOWN switches or the [1] to [12] number switches on the remote controller.
3. Press the MEMORY switch.

To check the timer settings

1. Press the WAKE UP switch. The wake-up time setting is displayed.
2. Press the switch again. The timer operation source is displayed.
 - If, with the tuner, the WAKE UP switch is pressed after step 2, the band, preset number and frequency will be indicated.
3. If the switch is pressed again, a return is made to the original display.
 - A return will be made to the original display unless the operations in steps 2 and 3 above are performed before the 10 seconds elapse.
 - To change the settings, perform steps 1 and 2 to display the setting which is to be changed, and press the MEMORY switch to make the display blink on and off. Then proceed in accordance with the instructions given in "WAKE UP timer settings".

To release the WAKE UP timer

1. Press the WAKE UP switch. The wake-up time is displayed.
2. If the CLEAR switch is pressed while the wake-up time is displayed, it will be released.
Only the present time will remain on the display.

USING THE SLEEP TIMER

When you are preparing to fall asleep, this timer switches off the power automatically when the set time in the operating mode has elapsed. There is a choice of 6 set times: 120, 90, 60, 30, 20 and 10 minutes.

1. Press the SLEEP switch. The "SLEEP OFF" appears and previous sleep time setting display blinks.
eg: SLEEP OFF 120
If the time display lights continuously, it means that the SLEEP timer is operating.
2. Press the SLEEP switch before the 10 seconds elapse, and set the desired sleep time.
Every time the SLEEP switch is pressed, the sleep time display will blink and change in the following sequence:
120 - 90 - 60 - 30 - 20 - 10 - (released) - 120 - . . .
 - When the SLEEP switch is pressed again while "10" is blinking or when the CLEAR switch is pressed, a return is made to the original display and the SLEEP timer setting mode is released.
3. Either press the MEMORY switch within 10 seconds or allow the 10 seconds to elapse. The selected sleep time changes from blinking to lit and after 2 seconds, a return is made to the original display and the SLEEP timer starts operating. (The "SLEEP OFF" display remains.)

- To check the remaining sleep time:
If the SLEEP switch is pressed while the SLEEP timer is operating, the remaining time will be displayed. A return is made to the original display if the MEMORY switch is pressed or 10 seconds are allowed to elapse.
- To release the SLEEP timer while it is operating:
Press the SLEEP switch and then press the CLEAR switch. The timer is also released when the power is switched off.

Timer priorities

- When the power is switched on by the WAKE UP timer and when, during the WAKE UP timer operation, the actual time reaches the ON time setting of the ON/OFF timer, the ON/OFF timer will not operate and it will be released.
- When the power is switched on by the ON/OFF timer and when, during the ON/OFF timer operation, the actual time reaches the wake-up time setting of the WAKE UP timer, the WAKE UP timer will not operate. In this case, however, the WAKE UP timer is not released.
- When the same time has been set for both the WAKE UP timer and the ON time for the ON/OFF timer, the ON/OFF timer has precedence and will operate.
- When the SLEEP timer has been set during an operation by the ON/OFF timer or WAKE UP timer, the power will be switched off after the time set by the SLEEP timer has elapsed. The ON/OFF timer will be released. (The SLEEP timer takes precedence.)

MAINTENANCE

Cleaning the stylus

From time to time, the stylus must be checked for dust particles etc. Cleaning is best carried out with a small very soft brush.

Stylus replacement (Fig. 14)

After long period of use or when an inferior sound is obtained, the stylus assembly should be replaced with a new one. To remove the stylus assembly, pull it downwards gently. To mount the new one, re-assemble in reverse order.

Please see the label on the turntable panel to find the stylus number.

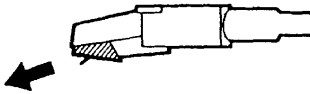


Fig. 14

Cleaning the deck 1 and 2 heads (Fig. 15)

To ensure playback and recording with good-quality sound, use cotton swab to clean the heads, pinch rollers and capstans of the decks after about every 10 hours of use. If the dirt persists, soak the swab in a little methylated spirit or head cleaning fluid and then clean.

Main unit

Use a soft cloth to remove dirt on the main unit.

If the dirt persists, dip a soft cloth into a diluted solution of neutral detergent, wring it out, wipe away the dirt, and then take up any moisture with a dry cloth.

Do not use benzine, thinners or alcohol since they will mar the finish of the surfaces. Also take care not to use insecticide sprays near the system.

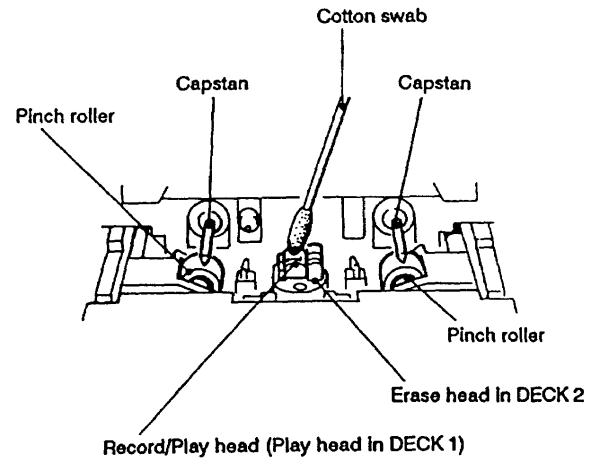


Fig. 15

REMOTE CONTROL OPERATION

Operation	Switch(es) to be pressed
(Common section)	
Power ON/OFF	"POWER"
Adjusting volume	"-" or "+" "VOL"
Selecting function	"CD", "PHONO" or "VIDEO"
(The CD, TAPE or TUNER function is automatically selected when CD play or tape playback has been started or when any of the tuner function switches (except MODE) has been operated.)	
Temporarily reducing volume	"MUTE"
Setting and checking sleep time	"SLEEP"
(CD player section)	
Opening/closing disc table	"▲"
Selecting disc	"DISC SKIP"
Setting 0 - 9, +10 switches to selecting CD tracks mode	"CD 10KEY"
Starting play from track 1	"▶/ "
Starting play from desired track	"CD10KEY" → (0 - 9, +10 switch)
Performing programmed play	"CD10KEY" → "MEMORY" → [(0 - 9, +10 switch) → "MEMORY"] → "▶/ " (repeating)
Temporarily stopping play	During play "▶/ "
Performing skip play	During play "◀◀" or "▶▶" (press one touch)
Searching	During play "◀◀" or "▶▶" (press continuously)
Performing intro play	"INTRO"
Performing random play	"RANDOM"
Performing repeat play	"REPEAT"
Stopping play	"■"
Checking remaining time	During play "TIME"
(Tuner section)	
Selecting band	"BAND" ([1] - [12] switches are set to tuner mode)
Tuning stations	"-" or "+" "TUN"
Listening to preset station	[1], [2], [12] or "PRESET"
Selecting FM mode	"MODE"
(Deck 1 section)	
Listening to tape	"◀" or "▶"
Fast forwarding/Rewinding	"◀◀" or "▶▶"
Stopping tape	"■"
(Deck 2 section)	
Listening to tape	"◀" or "▶"
Fast forwarding/Rewinding	"◀◀" or "▶▶"
Starting recording	"●/ " → "●/ ", "▶" or "◀"
Temporarily stopping recording	During recording "●/ "
Making unrecorded blank	"MUTE"
Stopping tape	"■"

Note:

For remote control operation, the supplied remote controller should be used.

SPECIFICATIONS

Tuner section	CD player section	Inputs:
Frequency range:	Channels	VIDEO: 47k ohms (280 mV)
FM: 87.5 - 108 MHz	2 channels	Outputs:
MW: 522 - 1611 kHz	Frequency response	SPEAKERS: 8 ohms
LW: 144 - 290 kHz	20 - 20,000 Hz	HEADPHONES: 8 ohms
Turntable section	S/N ratio	Power requirements:
Drive system:	95 dB	AC: 240 V, 50 Hz
Belt drive	Channel separation	Dimensions (W x D x H):
	90 dB (1 kHz)	Approx. 360 x 328 x 432 mm
Cassette deck section	Distortion	REMOTE CONTROLLER
Recording system:	0.13% (1 kHz)	Power requirements:
AC bias, 4-track stereo	Wow and flutter	DC: 3 V, "R6/HP 7" battery x 2
Rewind and fast forward time:	Undetectable	Dimensions (W x D x H)
Approx. 120 sec. (C-60)	General	Approx. 63 x 18 x 175 mm
	Output power:	
	40 W x 2 (at 8 ohms, 10% distortion)	

Specifications subject to change without notice.

GUARANTEE TO CUSTOMER

Sanyo U.K. Sales Ltd. (the Company) guarantees to the initial retail purchaser that if this equipment is or becomes defective and that, in the opinion of the Company, the defect is due to faulty material or workmanship the Company will, for a period of 12 calendar months from the date of sale to the original purchaser repair or replace, at its sole option, free of charge, any such defective component part of the equipment, always provided that: -

1. The equipment has at all times been used in accordance with the operating instructions issued by the Company, and has not been connected to an electrical mains supply for which it has not been adjusted.
2. Accidental damage, or damage caused by negligence or misuse by the user, including leakage from exhausted batteries, is specifically excluded.
3. Unauthorised repairs, or any modification to the equipment which has not been expressly approved by the Company, shall render this guarantee null and void.
4. Failure due to fair wear and tear of any item, such as batteries, record playing styli, and tape recording, playback and erase heads is specifically excluded.

This guarantee is not transferable and is only applicable within the United Kingdom (and the Republic of Ireland). Nothing in this express guarantee affects the statutory rights available to the purchaser of this equipment.

Note: This guarantee supersedes any other form of guarantee that may inadvertently have been enclosed with or attached to the product. (August 1978).

Dear customer

Thank you for buying Sanyo. This equipment should give you many years of pleasure and faithful service but in the event that a fault occurs, the following notes for your guidance may be helpful: -

1. PLEASE RETAIN YOUR PURCHASE RECEIPT WHICH WILL BE REQUIRED FOR SERVICE DURING GUARANTEE.
2. If your Sanyo equipment proves faulty during the period of guarantee, take it or send it back to the dealer who originally supplied it together with this guarantee and the proof of purchase. We have made arrangements with our approved dealers under which they will carry out in-guarantee service repairs on our behalf. In this way, we hope to reduce to a minimum the amount of time you will be without your equipment.
3. If for some reason it is impossible to return the equipment to the original supplier, please contact our Consumer Relations Department at the address below for further advice.
4. Should the equipment require servicing after the expiry of the guarantee period, take or send it to the original supplier or any other Sanyo dealer. He will be pleased to give you a quotation for the repair. If you are in any doubt about what to do, write to us at the address below or telephone:

Consumer Relations Department,
Sanyo U.K. Sales Ltd.,
Sanyo House
Otterspool Way, Watford,
Hertfordshire WD2 8JX
Tel: Watford 246363

R4

SANYO

SANYO Electric Co., Ltd.